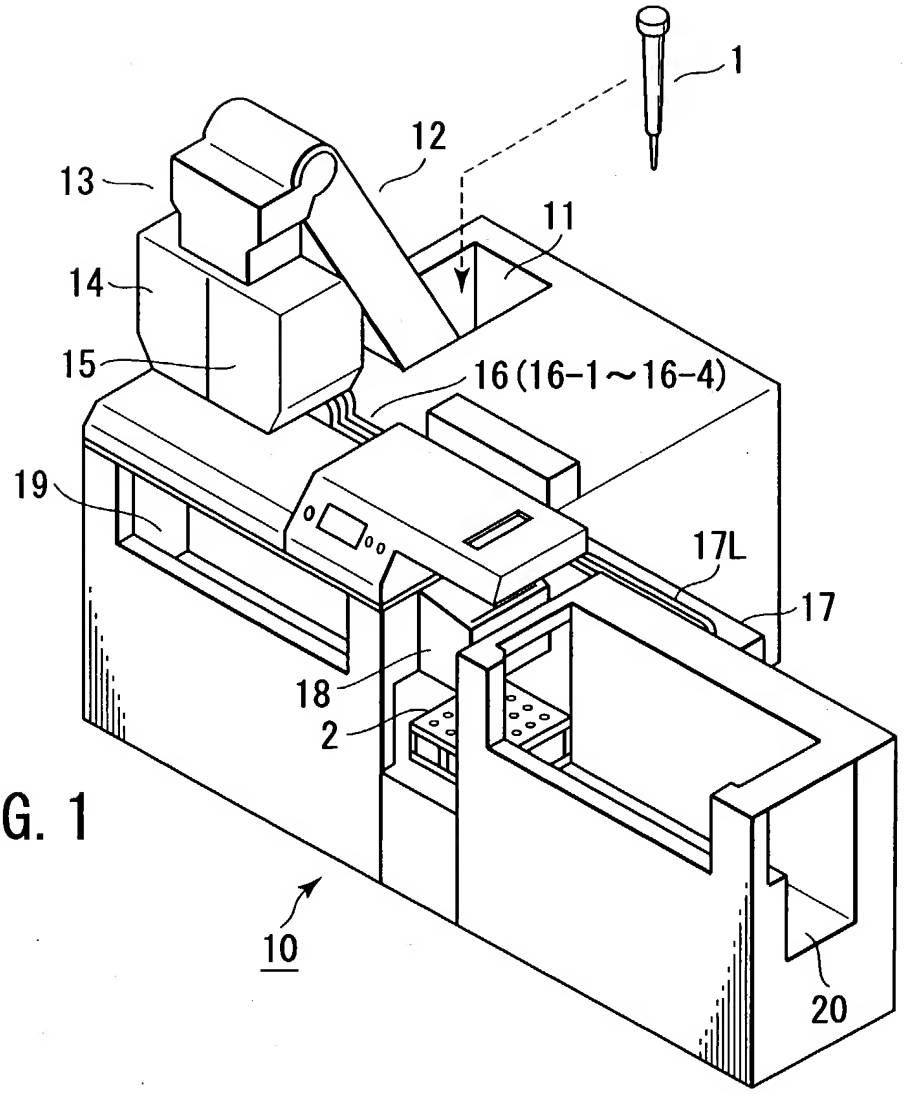
1
12
13
11
14
15
16 (16-1～16-4)
19
17L
17
18
2
10
20

FIG. 1

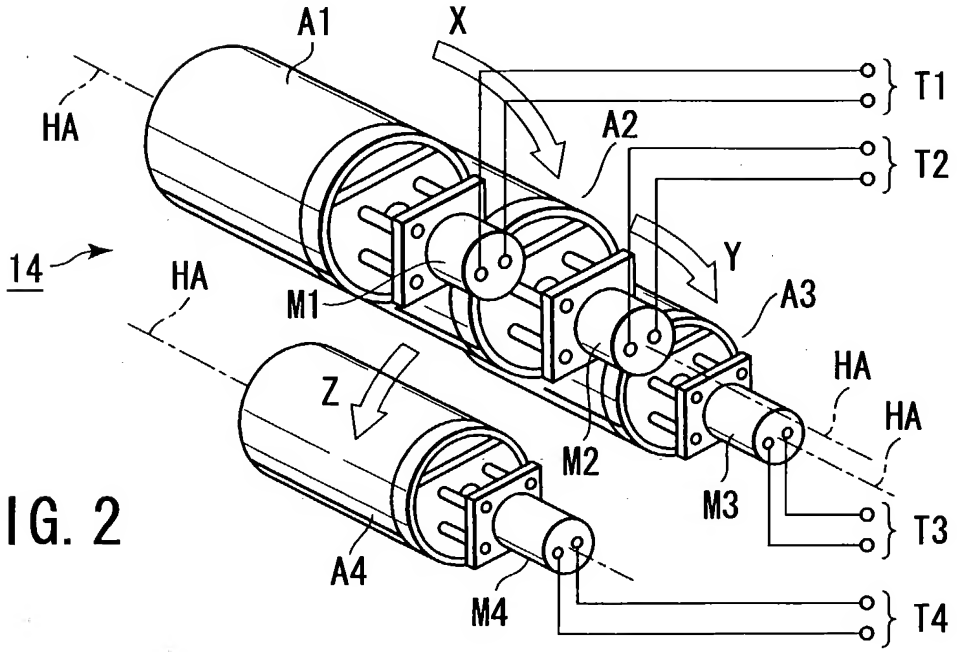
A1
X
HA
T1
A2
T2
14
HA
Y
M1
A3
HA
Z
HA
M2
M3
T3
A4
M4
T4

FIG. 2

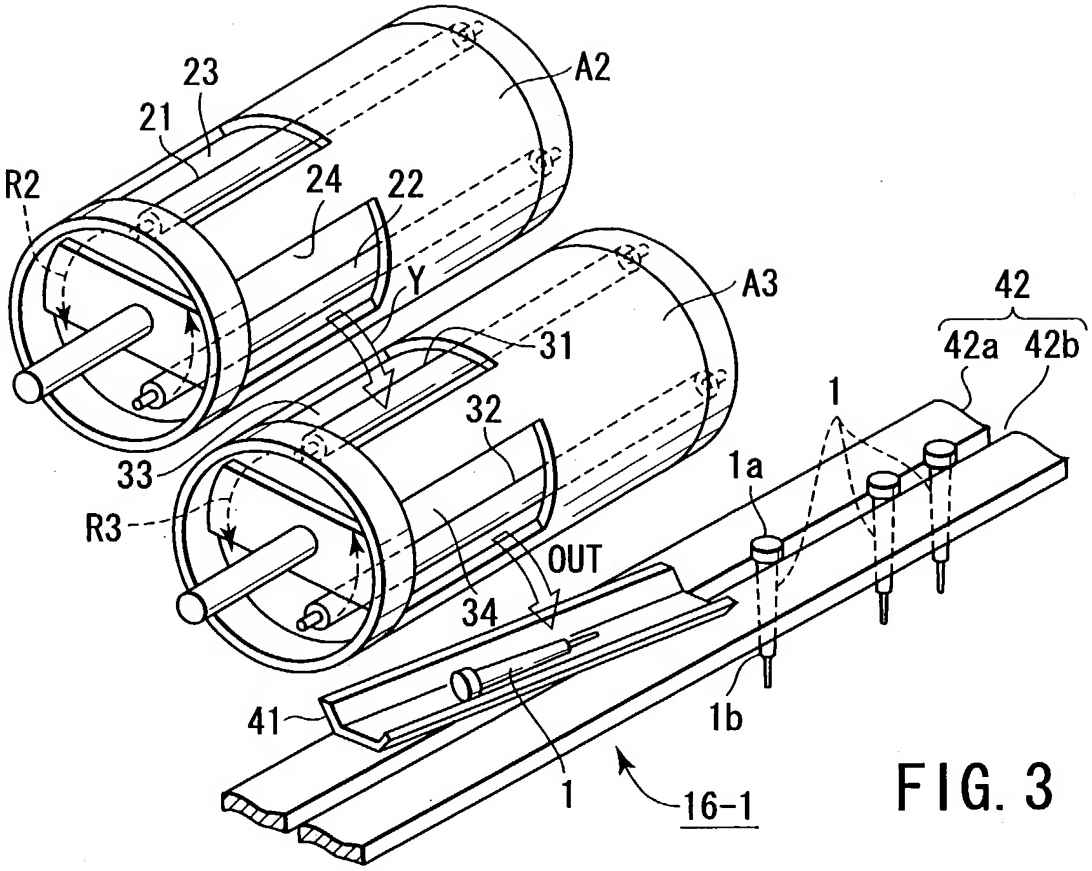
23
A2
21
R2
24
22
Y
A3
42
42a
42b
31
1
32
33
1a
R3
OUT
34
41
1b
1
16-1

FIG. 3

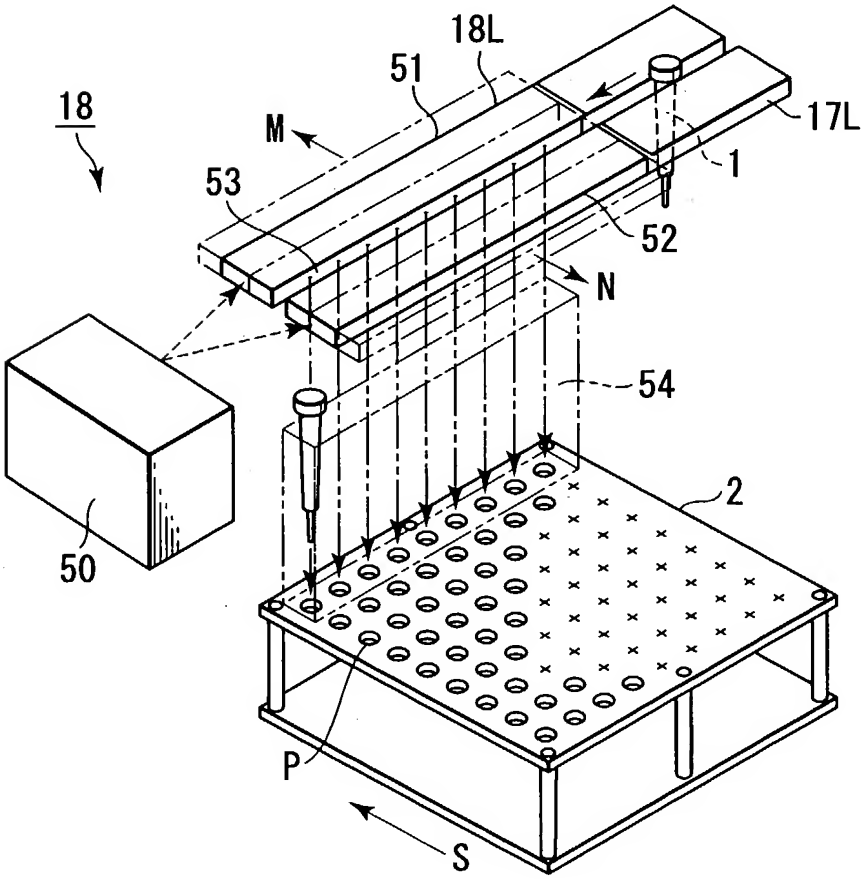
18L
51
18
M
17L
1
53
52
N
54
2
50
P
S

FIG. 4

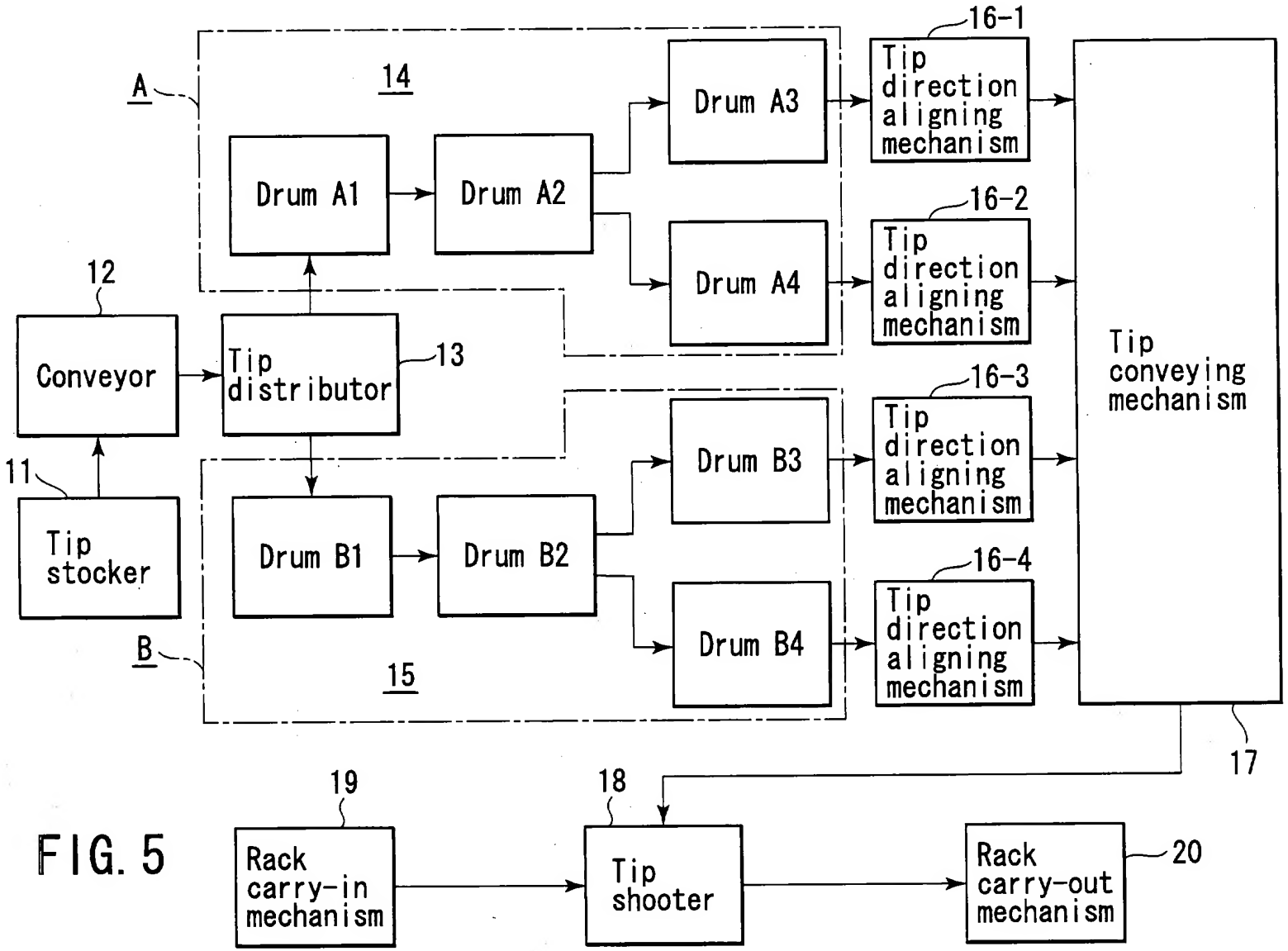
A
14
Drum A1
Drum A2
Drum A3
Drum A4
16-1
Tip direction aligning mechanism
16-2
Tip direction aligning mechanism
12
Conveyor
Tip distributor
13
11
Tip stocker
B
15
Drum B1
Drum B2
Drum B3
Drum B4
16-3
Tip direction aligning mechanism
16-4
Tip direction aligning mechanism
Tip conveying mechanism
17
19
Rack carry-in mechanism
18
Tip shooter
Rack carry-out mechanism
20

FIG. 5